



Homeland Defense

ARDEC – Picatinny, New Jersey 07806-5000

US Army Research, Development & Engineering Command

Overview of Homeland Defense Program

ARDEC Homeland Defense Technologies Thrusts

Objective

The terrorist attacks on September 11 awakened America to the fact that the threat of terrorism is an inescapable reality of life in the 21st century. It is a permanent condition to which America and the entire world must respond. While the Al Qaeda terrorist network is the most urgent terrorist threat, we must recognize that a new wave of terrorism, involving new weapons, looms in America's future. So the need for domestic security is not tied to any specific terrorist threat, but to the underlying vulnerability of America's free and open society. In order to be prepared to protect our liberty and meet these new threats, innovative strategies and technologies must be rapidly developed, adapted and applied.

Background

Picatinny has begun to make significant investments in technologies that are directly applicable to meeting Homeland Defense (HLD) and Homeland Security (HLS) challenges. Weapons related technologies include: compact robots that could improve search and rescue capabilities; hyperspectral cameras that could improve detection of chemical and biological agents; active ventilation protection systems that could defend against biological attacks; and smart tags for tracking the movement of cargo. Layered defenses (non-lethal and lethal response systems, sensors, and communications) could protect critical infrastructure such as bridges, tunnels, and ports. The development and integration of information technologies into a re-supply system that

anticipates weapon needs and facilitates the delivery of supplies at the right place and time without requiring a large stockpile in the forward area will also be useful in moving critical materiel in times of emergency. Shared, secure communication technologies and methods to enable sharing of intelligence between civil authorities and military intelligence gathering entities is also under development. So too are software Decision Aids to better coordinate multiple agency resources (personnel, equipment, teams, units, task forces). Innovative environmental clean up and decontamination technologies are also being developed and demonstrated under the New Jersey Environmental Technology Initiative.

Approach

Picatinny's approach for FY03 is to identify and transition a number of high pay-off technologies for use in Homeland Defense. It is intended to involve as much as possible regional First Responders, Local and State Homeland Security decision-makers as well as other governmental agencies.

For more information, contact the Center for Homeland Defense Technologies and Security Readiness via mail to: Commander, U.S. Army ARDEC, ATTN: AMSTA-AR-WE, Building 1, Picatinny Arsenal, NJ 07806-5000; via telephone at (973) 724-6165; or via e-mail to: pica-hld@pica.army.mil.

Technology Transfer

Army Technology Transfer to Homeland Defense/Homeland Security

Sensors



Simulators



Non-Lethal Capability Set (NLCS)

- Versatile Package of COTS, GSA & NDI Items As Well As New & Innovative Technologies
- CINC Requested & DA Directed Program to Procure & Field 10 Sets in FY00 & 01
- Urgently Fielded First Set to Kosovo in April 00 & to Bosnia in June 01, 2 Sets Urgently Fielded to FORSCOM

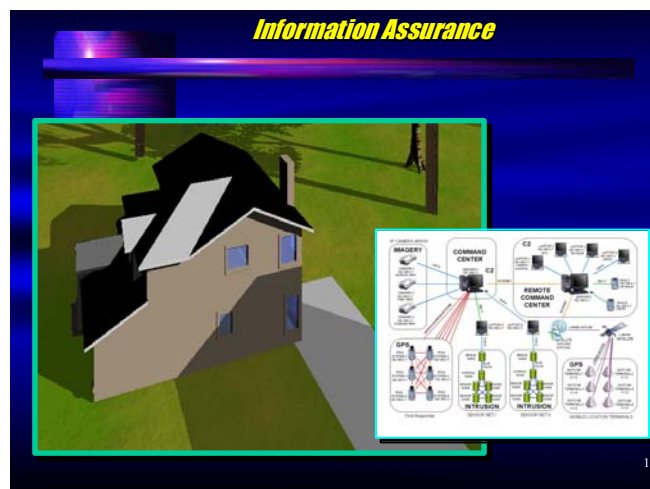
DESCRIPTION

50+ types of items, 5 categories:

- 1 - Individual Protective Equip.
- 2 - Individual Enhancement
- 3 - Mission Enhancement
- 4 - Munition
- 5 - Training Devices



Information Assurance



Robot Development and Training



SECURITY and EMERGENCY RESPONSE INFORMATION SYSTEM (SERIS)

